

## ABSTRACT OF THE DISCLOSURE

An image reading apparatus of the present invention converts respective pixel signals outputted from first, second and third shift registers to pixel data in an analog frontend IC and outputs pixel data as a serial data stream in a predetermined pattern. The address setting unit repeats add and subtract operation to the initial value according to the output pattern of the pixel data from the analog frontend IC to calculate pixel positions of the respective pixel data, and sets memory addresses corresponding to the pixel positions as destination memory addresses of the pixel data in an address register RR. The memory writing control unit writes the pixel data obtained from the analog frontend IC via a data sampling control unit in areas in the memory which correspond to the destination memory addresses. As a result, the amount of memory necessary for storing the pixel data can be reduced, and sorting operation of the pixel data can be executed with fewer memory access times.